

Claims

1. A method of writing information to a storage device, the method, implemented in the storage device comprising:

5 receiving a dual write command to write information to the storage device;
determining two locations to write the information;
performing a single reading of the information to be written into a read buffer;

and

10 writing the information to both of the two locations based on the single reading of the information.

2. The method of claim 1 wherein the at least one location is determined based on an address spread within the dual write command.

15 3. The method of claim 1 wherein the read buffer of the storage device is not cleared between the writing of the information to both of the two locations.

4. The method of claim 3 wherein the information to be read is associated with a bit flag designating a dual write operation.

20 5. The method of claim 3 wherein the information to be read is proceeded by a file header designating a dual write operation.

25 6. The method of claim 3 wherein one of the two locations is within a reserve area of the storage device.

7. The method of claim 6 wherein the reserve area is not accessible to a user.

30 8. The method of claim 1 wherein the two locations are determined based upon a percentage of an address size of the storage device.

9. The method of claim 3 wherein the storage device comprises a disk drive.
10. The method of claim 1 wherein the dual write command is a hard drive firmware command.

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11. The method of claim 1 wherein the two locations comprise a first location and a second location based, the second location being upon a calculation performed on the first location.

- 10 12. The method of claim 1 wherein the information is written to both of the locations during a same write cycle.

13. The method of claim 1 wherein writing the information to both locations comprises writing the information to a plurality of locations comprising both locations
15 and at least one additional location.

14. A method of writing information to a disk drive storage device, the method comprising:

- receiving a command to write information to the storage device;
- 20 determining if the command is a dual write command;
- if the command is a dual write command:
 - determining two locations to write the information;
 - reading the information to be written into a read buffer; and
 - writing the information to both of the two locations based up a single reading of
25 the information.

15. The method of claim 14 wherein the locations are determined based on an address spread within the dual write command.

- 30 16. The method of claim 14 wherein a read buffer of the storage device is not cleared between the writing of information to both of the two locations.

17. The method of claim 14 wherein one location is within a reserve area of the storage device which is not accessible to a user.

5 18. The method of claim 14 wherein the locations are determined as a percentage of the address size of the storage device.

19. The method of claim 14 wherein data is first written into a location having a lower address than the location at which the data is written a second time.

10 20. A method of causing a disk drive to write information on storage within the disk drive, the method comprising:

identifying data to be written to two different locations on the disk drive;
generating a command including an identification of the data, a dual write option,
15 and an indication of an offset; and
sending the command to the disk drive.

21. The method of claim 20 wherein a read buffer of the storage device is not cleared between the writing of information to both locations.

20 22. The method of claim 20 wherein one location is within a reserve area of the storage device which is not accessible to a user.

23. A disk drive having storage media, the disk drive comprising:
25 means for receiving commands related to writing data;
a controller for processing the received commands;
means for reading data to be written; and
means for writing the same data to two different locations on the storage media
based on the received commands while only reading the data once.

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24. The disk drive of claim 23 wherein the controller comprises an ATA (Advanced Technology Attachment) controller.

25. A method of causing a disk drive to write information on storage within the disk

5 drive, the method comprising:

identifying data to be written to two different locations on the disk drive;
generating a code selected from the group consisting of set double write, set address spread and clear double write; and
sending the code to the disk drive.

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26. The method of claim 25 wherein multiple codes are sent to the disk drive to control the disk drive to write data to two different locations on the disk drive.

27. The method of claim 25 wherein the set double write code commands the disk

15 drive to write following data to two different locations.

28. The method of claim 27 wherein the set address spread code identifies the different between addresses where the data is to be written twice.

20 29. The method of claim 27 wherein the clear double write code causes the disk drive to return to a single location writing state.